



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
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Mr. Wayne Thistle
44 Cross Brook Rd.
Loudon, NH 03307

Re: DES Wetlands File No. 2001-02480
DES Site Specific File WPS-6194

**ADMINISTRATIVE ORDER
WD 02-34**

November 6, 2002

A. INTRODUCTION

This Administrative Order is issued by the New Hampshire Department of Environmental Services, Water Division, to Mr. Wayne Thistle pursuant to RSA 482-A:6 and RSA 485-A:17. This Administrative Order is effective upon issuance.

B. PARTIES

1. The New Hampshire Department of Environmental Services, Water Division ("DES"), is a duly constituted administrative agency of the State of New Hampshire, having its principal office at 6 Hazen Drive, Concord, NH 03301.
2. Wayne Thistle is an individual having a mailing address of 44 Cross Brook Road, Loudon, NH.

C. SUMMARY OF FACTS AND LAW SUPPORTING CLAIMS:

1. RSA 482-A authorizes DES to regulate dredging, filling, and construction in or on any bank, flat, marsh, wetland, or swamp in and adjacent to any waters of the state. Pursuant to RSA 482-A:11, I the Commissioner of DES has adopted Wt 100 *et seq.* to implement this program.
2. RSA 482-A:3, I states that "no person shall excavate, remove, fill, dredge or construct any structures in or on any bank, flat, marsh, or swamp in and adjacent to any waters of the state without a permit from [DES]."
3. RSA 482-A:14, III provides that "failure, neglect or refusal to comply with [RSA 482-A] or rules adopted under [that] chapter, or an order or condition of a permit issued under [RSA 482-A], and the misrepresentation by any person of a material fact made in connection with any activities regulated or prohibited by [RSA 482-A] shall be deemed violations of RSA 482-A."

4. Pursuant to RSA 485-A:17, DES regulates significant alteration of terrain and erosion control through a permit program. Pursuant to RSA 485-A:6, VIII, DES has adopted NH Administrative Rules Env-Ws 415 to implement this program.
5. Wayne Thistle is the owner of the property located at Cross Brook Rd., Loudon, NH, more specifically reference on Loudon Town Tax Map as Lots 10 and 12 (the "Property").
6. On October 29, 2001, DES personnel inspected the Property for permitting purposes. During the inspection, DES personnel observed that a section of the extension to Cross Brook Road was constructed, but the road was not extended across Bee Hole Brook. The wetlands permit for the extension of Cross Brook Road was pending at this time. DES personnel additionally observed that slopes leading down to Bee Hole Brook were not stabilized and siltation fence was installed too close to the channel of Bee Hole Brook to protect adjacent wetlands. DES personnel requested that Mr. Thistle pull back the silt fences to the toe of slope, stabilize the slope down to Bee Hole Brook with seed and mulch, and submit photographs documenting compliance with these requests. No photographs were submitted.
7. On April 19, 2002, DES issued Wetlands and Non-Site Specific Permit No. 2001-02480 (the "Wetlands Permit") to Wayne Thistle for the extension of Cross Brook Road (Wt. File #2000-0078). The Wetlands Permit authorized one 120 ft. long perennial stream crossing including the installation of a three-sided steel plate pipe arch, and one 77 ft. long intermittent stream crossing, and the fill of 7,210 sq. ft. of palustrine and riverine wetland systems, to provide access to a proposed 16-lot subdivision on 200.12 acres (the "Project").
8. Condition 1 of the Wetlands Permit required that "all work shall be done in accordance with plans by Brown Engineering dated September 1, 2001, as received by the Department on April 8, 2002" (the "Plans"). The Plans detail the sequence of construction, and the measures for erosion and sediment control. Relevant provisions of the Plans include:
 - a. Item 1 of the Erosion Control Notes required that the "installation of hay bale barriers and siltation fences shall be completed prior to the start of site work in any given area. Prefabricated siltation fences shall be installed according to the manufacturer's recommendations."
 - b. Item 2 of the Erosion Control Notes required that "haybale barriers and siltation fences shall be kept clean during construction and removed when all slopes have a healthy stand of vegetative cover. Erosion control measures shall be inspected on a weekly basis and after every rainfall."
 - c. Item 2 of the Construction Sequence required the construction of temporary and permanent erosion control facilities prior to any earth moving operation.

- d. Item 3 of the Construction Sequence required that "all stockpiles shall be seeded with winter rye and if necessary surrounded with hay bales in order to prevent loss by erosion."
 - e. Item 4 of the Construction Sequence required all slopes to be stabilized immediately after grading.
9. Condition 5 of the Wetlands Permit required that "the Permit shall not be effective until it has been recorded with the Registry of Deeds Office by the Permittee. A copy of the registered permit shall be submitted to the DES Wetlands Bureau."
10. Condition 6 of the Wetlands Permit required that appropriate siltation/erosion/turbidity controls be in place prior to construction, maintained during construction, and remain until the area is stabilized.
11. Condition 7 of the Wetlands Permit required that orange construction fencing be placed at the limits of construction adjacent to wetlands to prevent accidental encroachment on wetlands.
12. Condition 15 of the Wetlands Permit required the contractor responsible for completion of the work to utilize techniques described in the DES Best Management Practices for Urban Stormwater Runoff Manual (January, 1996) and the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire (August, 1992).
13. On May 31, 2002, DES issued Site Specific Permit No. WPS-6194 (the "Site Specific Permit") to Mr. Thistle for the Project.
14. Item 1 of the Site Specific Permit required that "water quality degradation shall not occur as a result of the project."
15. Item 2 of the Site Specific Permit required that "revised plans shall be submitted for permit amendment prior to any changes in construction details or sequences. The Department must be notified in writing within ten days of a change in ownership."
16. On September 4, 2002, DES personnel inspected the Property and observed the following:
- a. Silt fencing was not maintained along the edge of wetlands. Silt fence had not been installed at the toe of slopes adjacent to the banks of Bee Hole Brook and at wetland crossing #3 as required by the Plans.
 - b. Exposed slopes were not stabilized

c. Failure to install erosion controls had caused sediment (fill) to be deposited in Bee Hole Brook. Additionally, at wetland crossing #3, a culvert pipe was not installed in accordance with the Plans and erosion controls were not installed to protect adjacent wetlands. As a result, sediment laden runoff was pooling in and adjacent to wetlands.

d. Soil material was stockpiled adjacent to wetlands. Temporary erosion controls such as hay bales or silt fence were not in place around the base of stockpiles, nor were stockpiles seeded with winter rye to prevent loss by erosion.

e. Orange construction fencing was not installed to prevent encroachment onto wetlands.

f. The construction area for the extension of Cross Brook Road had been cleared and grubbed, construction of the road extension was on-going, the house at lot 14 was being constructed, and slopes adjacent to the road were graded.

g. DES personnel collected turbidity samples in Bee Hole Brook. A background sample measuring 8.2 Nephelometric Turbidity Units ("NTUs") was taken 100 ft. east (upstream) of the culvert, a second sample taken at the east (upstream end) of the culvert measured 75 NTUs, and a third, taken 10 ft. west of the downstream end of the culvert measured 37 NTUs.

17. DES personnel met with Mr. Thistle during the September 4, 2002, inspection. At the meeting, DES personnel stressed the importance of stabilizing the site as soon as possible to prevent further erosion of sediments into jurisdictional wetlands and Bee Hole Brook. At the September 4, 2002 inspection, DES personnel offered the following recommendations:

a. Tack, mulch, and seed exposed slopes and stockpiles. Surround stockpiles with temporary erosion control measures to prevent further erosion.

b. Install hay bales, trench in siltation fences, and repair or install remaining erosion controls as required by the Construction Sequence and Erosion Control Notes on sheet C-10 of the Plans.

c. Install water bars and check dams where necessary to prevent channelized flow of sediments off the roadway into wetland areas.

d. Install orange construction fencing at the limits of construction to prevent accidental encroachment into wetlands.

e. Retain a qualified wetland scientist to supervise the execution of items 1-4 (above), and to design a restoration plan for removal of sediment in Bee Hole Brook.

8. On September 5, 2002, DES personnel faxed a typed copy of these observations and

recommendations to Mr. Thistle.

19. On September 9, 2002, DES personnel contacted the Merrimack County Registry of Deeds. The Registry of Deeds informed DES personnel that the Wetlands Permit (2001-02480) was not recorded.

20. On September 10, 2002, DES personnel conducted a follow-up inspection of the Property and observed the following:

a. Slopes were not stabilized above culvert headwalls, on either side of the culvert headwalls, or in back of lot 14 adjacent to the east bank of Bee Hole Brook, as requested during the September 4, 2002, inspection. Mulch was being applied to some of the slopes during the inspection;

b. Silt fences were neither installed along culvert headwalls, located at the toe of steep, unstable slopes, nor at the toe of slopes near the start of construction of Cross Brook Rd. Silt fence had been installed and backed with hay bales at the toe of slopes on either side of the culvert at Bee Hole Brook;

c. Stockpiles were neither ringed with silt fence, hay bales, or other temporary erosion controls, nor stabilized with vegetation;

d. Rip-rap swales to the west of Bee Hole Brook were constructed but check dams along the swales were constructed of stone that was too large to significantly slow flow and allow sediment to filter out. Level spreader #1 and treatment swale #1 were not constructed as specified in the Plans. Mr. Thistle said that level spreader #1, located downstream of the culvert and adjacent to the westerly bank of Bee Hole Brook, could not be constructed without removing further trees, which he thought might cause bank erosion because of the channelized water flowing down the rip-rap swale. Rip-rap swales to the east of Bee Hole Brook were not constructed;

e. Orange construction fencing was not installed at the limits of construction adjacent to wetlands;

f. Wetland crossing #3 was not constructed in accordance with the Plans. A channel had been excavated alongside the permitted 18" culvert crossing the roadway. The channel was completely exposed, no erosion controls were installed and the channel had filled with sediment laden water. Hay bales and silt fence had been installed at either end of the culvert. There was evidence of sediment outside the silt fence. The rip-rap apron, designated in the Plans, was not constructed;

g. Mr. Thistle said he had contacted Peter Schauer, C.W.S. from Schauer Environmental Consultants, L.L.C., to assist with the restoration, but Mr. Schauer had not yet been on site; and

h. DES personnel measured 1,362 linear feet of sediment 1.5 - 8 inches deep in Bee Hole Brook (forty-seven linear ft. upstream of the culvert, 95 linear ft. in the culvert, 1,220 linear ft. downstream of culvert).

21. DES personnel met with Mr. Thistle during the September 10, 2002, inspection. At the meeting, DES personnel again stressed the importance of stabilizing the site to prevent further erosion of sediments into jurisdictional wetlands and Bee Hole Brook, and retaining a wetlands scientist to design an erosion control plan to prevent further migration of sediments downstream during subsequent rain events. At the September 10, 2002 inspection, DES personnel offered the following written recommendations:

- a. Mulch all slopes, specifically those slopes leading down to the culvert, above the culvert headwalls, along the backside of house lot 14 adjacent to Bee Hole Brook and near the start of roadway construction;
- b. Install silt fence and back with hay bales along the culvert headwalls and at the toe of slopes on the southerly side of the start of roadway construction;
- c. Install silt fence around all stockpiles, particularly those along lot 14, downstream of the culvert and adjacent to the east bank of Bee Hole Brook;
- d. Install smaller stone for the check dams along the roadside drainage swales to slow flow velocities in these swales;
- e. Contact Peter Schauer, C.W.S., immediately to prepare a restoration plan for Bee Hole Brook and to design measures to prevent further migration of sediment downstream; and
- f. Contact Ridge Mauck, DES Site Specific Program, to discuss the changes made to treatment swale #1 and level spreader #1 (located downstream of the culvert on the westerly side of Bee Hole Brook).

22. On September 11, 2002, DES personnel inspected the Property a third time and observed the following:

- a. The steep slopes on either side of the arched culvert at Bee Hole Brook, and those located behind house lot 14, were not stabilized. Mr. Thistle agreed at this time to stabilize the slopes adjacent to the culvert with jute matting and to extend silt fence along the toe of the slope behind house lot 14; and
- b. Mr. Thistle continued to work on grading the road and slopes. DES advised Mr. Thistle that stabilization of the Property was a priority and slopes should be stabilized immediately.

23. At the September 11, 2002, inspection, Mr. Thistle told DES personnel that Peter Schauer, C.W.S., had been to the site that morning and recommended the installation of 2 check dams across Bee Hole Brook to the west of the culvert to prevent further downstream migration of sediment during rain events. Mr. Thistle told DES personnel that Mr. Schauer would contact DES soon to further discuss restoration.

24. On September 13, 2002, Mr. Schauer faxed DES an emergency restoration plan (the "Restoration Plan"). The Restoration Plan proposed to "remove silt from the stream by hand with buckets, placing silt in uplands outside of the Wetlands Bureau jurisdiction. The fill slopes must be stabilized and silt fence placed at the top of the culvert and along the slopes of the fill on both sides of the road." Mr. Schauer requested that DES issue a restoration order so that work may be started and completed by the end of the day on September 14, 2002, since rain was forecasted for September 15, 2002.

25. On September 13, 2002, DES issued a restoration plan approval for the Restoration Plan

26. On September 16, 2002, DES personnel inspected the Property for a fourth time and observed the following:

a. Five stone check dams were constructed across Cross Brook Road. The check dams contained accumulations of sediment. Silt fence detention bays where water from the check dams was directed had failed and additional sediment had been deposited in Bee Hole Brook;

b. Silt fence was installed behind house lot 14. In this location, three areas of silt fence had failed but sediment had not reached Bee Hole Brook in two of these locations; and

c. DES personnel collected turbidity samples in Bee Hole Brook during the September 16, 2002, inspection. A background sample measuring 7.1 NTUs was taken 50 ft. east (upstream) of the culvert, and a second sample measuring 33 NTUs was taken 100 ft. west (downstream) of the culvert.

27. Pursuant to Chapter 41, Laws of 1951, Bee Hole Brook is classified as a Class B surface water.

28. Pursuant to Env-Ws 1703.11(b), turbidity in Class B waters shall not exceed naturally occurring conditions by more than 10 NTUs.

29. RSA 485-A:13, states that it shall be unlawful for any person or persons to discharge or dispose of any sewage or waste to the surface or groundwater of the state without first obtaining a permit from DES.

30. Sediment-laden water constitutes waste as defined under RSA 485-A.

D. DETERMINATIONS

1. Mr. Thistle has violated RSA 482-A:3, I, by filling 1,362 linear feet of Bee Hole Brook with sediment.
2. Mr. Thistle has violated RSA 482-A:14, III, by failing to comply with Condition 1 of the Wetlands Permit. These violations specifically included:
 - a. Failing to install silt fencing and other temporary erosion control measures. This is also a violation of Condition 6 of the Wetlands Permit;
 - b. Failing to construct permanent erosion, sediment, and detention facilities prior to earthmoving in the work area;
 - c. Failing to stabilize stockpiles or surround them with temporary erosion controls; and
 - d. Failing to stabilize graded slopes.
3. Mr. Thistle has violated RSA 482-A:14, III, by failing to comply with Condition 5 of the Wetlands Permit, requiring that the Permit shall not be effective until it has been recorded with the Registry of Deeds Office by the Permittee.
4. Mr. Thistle has violated RSA 482-A:14, III, by failing to comply with Condition 7 of the Wetlands Permit which required that orange construction fencing shall be placed at the limits of construction to prevent accidental encroachment on wetlands.
5. Mr. Thistle has violated RSA 482-A:14, III, by failing to comply with Condition 15 of the Wetlands Permit which required the contractor responsible for completion of the work to utilize techniques described in the DES Best Management Practices for Urban Stormwater Runoff Manual (January, 1996) and the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire (August, 1992).
6. Mr. Thistle has violated RSA 482-A:12, by failing to post the Wetlands Permit on the Property.
7. Mr. Thistle has violated RSA 485-A:13, and Item 1 of the Site Specific Permit, by discharging sediment laden water into surface waters of the state without a permit from DES.
8. Mr. Thistle has violated RSA 485-A:17, and Item 2 of the Site Specific Permit, by failing to comply with the construction details and sequences approved in the Plans.

E. ORDER

Based on the above findings, DES hereby orders Mr. Wayne Thistle as follows

1. Immediately **cease and desist** all construction activities on the Property except for measures necessary to stabilize the site as specifically authorized by this Order.
2. Immediately install hay bales and siltation fences in accordance with the Plans. Properly install additional silt fence along the top of culvert headwalls, at the toe of slopes on the south side of the start of construction, adjacent to jurisdictional wetlands at wetland crossings #2 and #3, along the westerly edge of house lot 14, and at the base of all stockpiles. Install silt fence in accordance with the installation technique described and illustrated in sheet C-10 of the Plans. In areas where silt fence has previously breached, install two rows of silt fence and back with hay bales.
3. Immediately install check dams, rip-rap swales, level spreaders and treatment swales in accordance with the Plans. Water shall be diverted from level spreaders and treatment swales until they are stabilized by established vegetation.
4. Immediately rip-rap all slopes steeper than 2 in accordance with sheet C-1 of the Plans.
5. Immediately stabilize all disturbed areas with loam, seed, mulch and tack netting.
6. Immediately install orange construction fencing at the limits of construction to prevent accidental encroachment into wetland areas.
7. Within 15 days of this Order, submit an amended restoration plan to DES for review and approval. At a minimum, the amended restoration plan shall include the following additional materials:
 - a. A construction sequence including:
 - Equipment and methods for completion of the restoration; and
 - ii. A target date for completion of restoration
 - b. A monitoring schedule, including
 - i. Two restoration progress assessment reports, due December 16, 2002 and June 1, 2003, by a certified wetland scientist to be filed with the DES Wetlands Bureau; and
 - ii. A failure response strategy, including criteria for evaluating the progress of the restoration.

8. Execute the amended Restoration Plan upon receipt of DES approval. Continue to manually remove sediment from Bee Hole Brook during periods of low flow in accordance with the approved Restoration Plan (referenced in Section C.24 of this Order).
9. Continue to retain a certified wetland scientist to supervise the execution of these requests and submit restoration progress assessments, dated December 16, 2002, and June 1, 2003. Submit a letter of retention to DES within 10 days of the date of this Order.
10. Submit biweekly and post-rainfall event inspection reports of erosion control measures to DES throughout the remainder of the project.
11. Immediately post a copy of Wetlands Permit 2001-02480 in a secure manner in a prominent location on the Property.
12. Within seven days of this Order, record Wetlands Permit 2001-02480 with the Merrimack County Registry of Deeds and submit a copy of the registered permit to the DES Wetlands Bureau.
13. Submit, photographs and written documentation of compliance with all aforementioned requirements and conditions within five days of completion unless otherwise specified by this Order.

Send correspondence, data, reports, and other submissions made in connection with this Administrative Order, **other than appeals**, to DES as follows:

Ridgely Mauck, P.E.
DES Water Division, Site Specific Program
6 Hazen Drive - P.O. Box 95
Concord, NH 03302-0095

D. APPEAL

Any person aggrieved by determinations D.1-6 of this Order may appeal the Order to the New Hampshire Water Council by filing an appeal that meets the requirements specified in Env-WC 200 within 30 days of the date of this Order. Copies of the rule are available from the DES Public Information Center, on the web at <http://www.des.state.nh.us/desadmin.htm> or at (603) 271-2975.

Any person aggrieved by determinations D.7 and D.8 of this Order may apply for reconsideration to the DES Wetlands Bureau with respect to any matter determined in this action within 20 days from the date of the Order. A motion for rehearing must describe in detail each ground for the request. DES may grant a rehearing if in its opinion, good reason is provided in the motion.

Filing an appeal or motion for reconsideration of the Order will not automatically relieve Mr. Thistle of his obligation to comply with the Order.

G. OTHER PROVISIONS

Please note that RSA 482-A, and RSA 485-A provide for administrative fines, civil penalties, and criminal penalties for the violations noted in this Order, as well as for failing to comply with the Order itself. Mr. Wayne Thistle remains obligated to comply with all applicable requirements. DES will continue to monitor the Project for compliance with applicable requirements and will take appropriate action if additional violations are discovered.

This Order is being recorded in the Merrimack County Registry of Deeds so as to run with the land.



Harry T. Stewart, P.E., Director
Water Division



George Darla Bisbee
Acting Commissioner
Department of Environmental Services

Certified Mail/RRR: 7000 0600 0023 9936 1017

cc: Gretchen Rule, DES Legal Unit
Rene Pelletier, DES Land Resources Management Program
Public Information Officer, DES PIP Office
Mary Ann Tilton, Enforcement, DES Wetlands
Ana Ford, Enforcement, DES Site Specific
Merrimack County Registry of Deeds
Loudon Conservation Commission
Loudon Planning Board
Loudon Code Enforcement Officer
Debbie Kardaseski, Loudon Town Selectman